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THE JAHANGIRI MAHAL OF THE AGRA FORT: EXPRESSION AND EXPERIENCE IN EARLY MUGHAL ARCHITECTURE

The palaces of the Agra Fort provide the material for an eloquent exegesis on the development of early Mughal architecture in a progressive sequence spanning some seventy years; they also yield a synoptic view of the Mughals' changing attitudes toward the typology and articulation of palace building as practiced under Akbar (r. 1556-1605), Jahangir (r. 1605-27), and Shah Jahan (r. 1628-58). They are situated in the southeast quadrant of the fortress, where they were effectively protected from public areas; their outer walls rise with the massive ramparts of the citadel above the Jumna River. Their strategic dominance over the surrounding riverscape of Agra clearly announces an imperial presence (fig. 1).

Central to this scheme, if not to the present layout of the palace enclave, is the so-called Jahangiri Mahal. Despite its name, it can be firmly attributed to Akbar's rebuilding of the Agra Fort in the mid 1560's; it is one of the earliest surviving buildings of Akbar's reign and the earliest Mughal palace extant.¹ Originally it no doubt served as the nucleus for a unified palace design consisting of three semi-independent structures. These also included the contemporary structure abutting it to the south (the so-called Akbari Mahal) and the Anguri Bagh-Khass Mahal area (largely rebuilt under Akbar's successors) to its immediate north.² The projection of the fortress wall along this area, a scheme in which the later and reoriented Macchi Bhavan to the north patently shares no role, serves to delineate and distinguish this palace compound from the rest of the citadel. The Jahangiri Mahal is the only portion of the fortress walls apart from the gates to be further distinguished by the ornamental treatment accorded its outer façade (fig. 2).

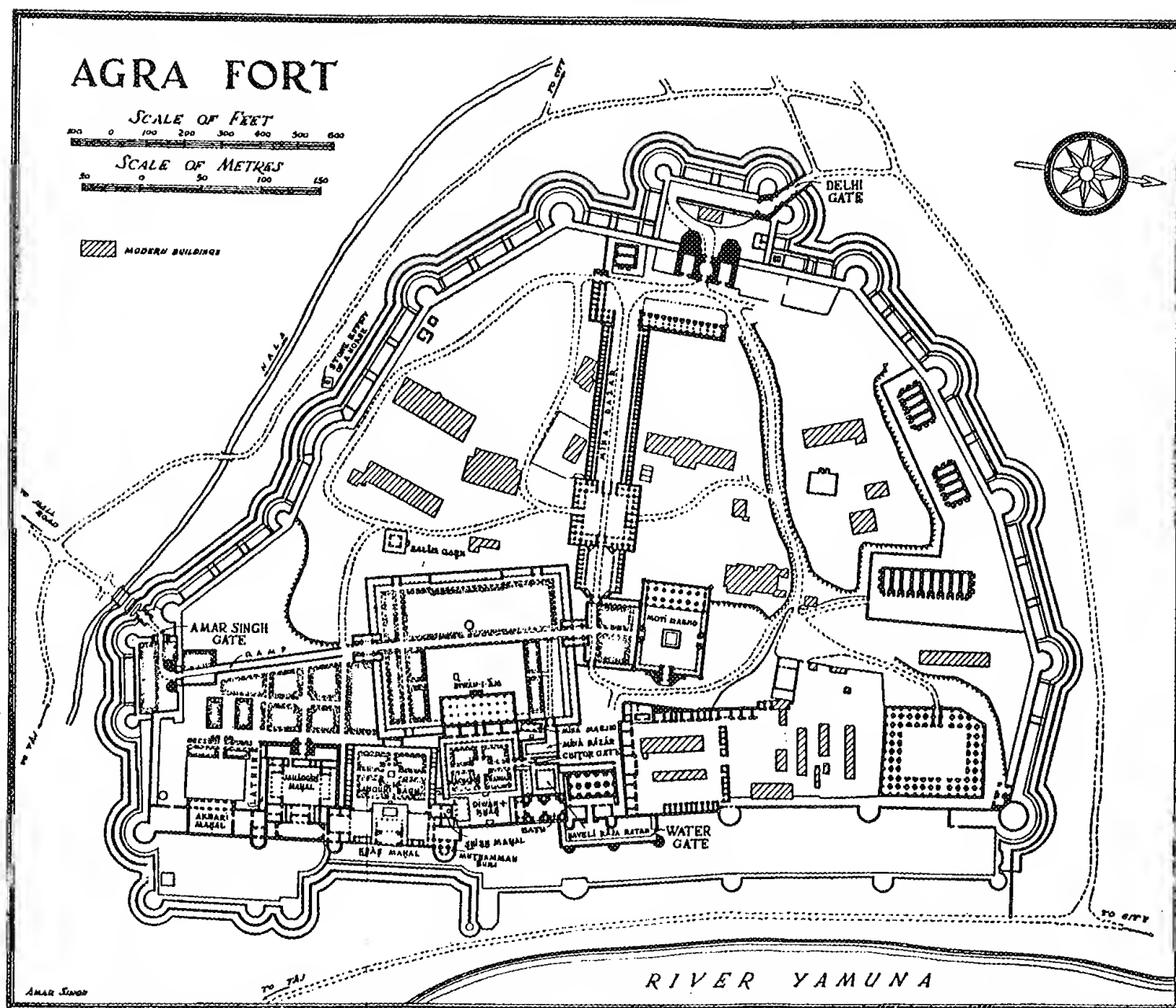
The architectural experience of the Jahangiri Mahal relies on several key aspects of its character. Among these are the qualities of clarity, simplicity, and integrity which define its basic spatial formula, itself

the product of an essential underlying geometry from which the deliberate, sequentially organized plan is developed. Equally apparent is the remarkable virtuosity of surface ornament that animates the whole. The architectural identity of the Jahangiri Mahal is revealed as a series of progressive spatial and material relationships, which unfold as one moves through the building. In a structure devoid of any inscriptions or historic reference, the building itself must provide an understanding of its function and meaning.

GEOMETRY AND PLANNING

The design of the Jahangiri Mahal is formed from a symmetrical, coordinated system of open and closed spaces which revolve around the simple, centralized scheme established by court A (fig. 3). The rigorous segregation of these spaces, however, introduces an apparent complexity in the plan heightened by the additional, at times overlapping, foci established by the other courts. Court B, for example, functions with court A in creating a bi-radial organization that provides the essential pattern of the design. Secondary patterns are set forth elsewhere in the plan—the strongly linear thrust provided by court F (and its now destroyed counterpart on the north side of the building) and the clustered arrangements provided by the individual courts and immediately adjoining chambers. Balancing these various organizational modes appears as a major concern in the building's design.

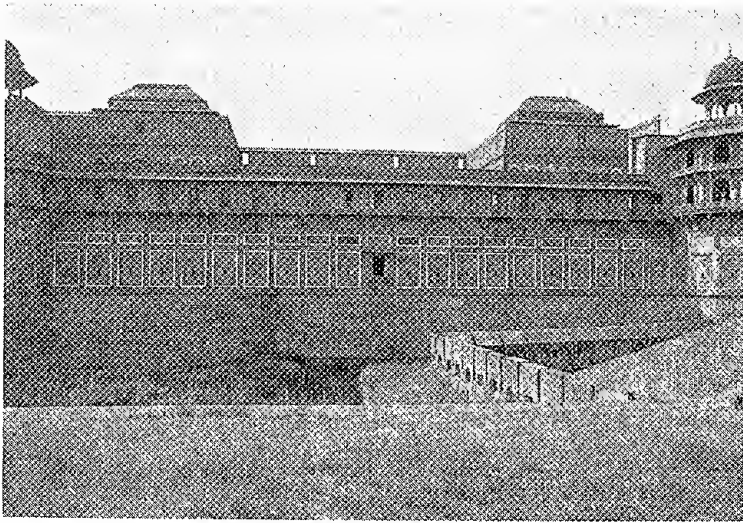
The Jahangiri Mahal relies on several formulas to produce its system of spatial relationships, but fundamental to these is the building's inherent geometry. In plan, it is a regular, rectangular area defined by a cross-axial ratio of 5:4 (east-west/north-south). The central east-west axis running from the front portal to the river wall measures approximately 77.5 m.; the lateral north-south axis bisecting court A through



1. Agra Fort. Plan. From Muhammad Ashraf Hussain, *Agra Fort* (New Delhi: Archaeological Survey of India, 1958).

rooms 3 and 4 measures about 62.5 m. In the measurement of the period, these dimensions correspond quite closely to 100 by 80 *gaz-i sikandari*.³ Establishing a sequence of lateral axes at intervals of 20 *gaz* (as has been done on the plan; fig. 4), thus subdividing the central axis by equal fifths, the major organizing features of the plan are revealed as the centers of courts A and B and the lateral sequences of rooms that flank court A to east and west. Additional lateral, longitudinal, and diagonal subdivisions further develop the geometric coordination of the design.

The extent to which this geometrization of the plan can legitimately be pursued is uncertain. The geometry of this and other Mughal buildings can be easily discerned, but there are no documents to demonstrate this formulaic approach to planning and construction beyond a single Akbar-period miniature which shows Babur holding a simple, gridded garden layout. Recent attempts to apply this approach on a grander scale to the design of the Fatehpur-Sikri palaces are tantalizing but inconclusive.⁴ The Timurids' reliance on an architectural geometry is certainly reflected in the



2. Jahangiri Mahal. Eastern façade. (This and all subsequent illustrations are by the author.)

buildings of their Mughal descendants. The situation becomes complicated, however, by the existence of an indigenous Indian tradition of geometric formulation, particularly as applied to temple design. Either tradition could be plausibly argued as the generative principle behind the Jahangiri Mahal's design. Without further information about either the practices or even the identities of the builders employed in Agra, however, the origins of the design cannot be determined. It may be in this case, as in so many other aspects of Mughal architecture, that the constructive geometry practiced there is only another synthetic product of the coincidence of the Iranian and Indian building traditions.

Whatever its origins, an important effect of this building geometry is the overall coordinating character it imposes on the plan of the Jahangiri Mahal, whose product is a system of harmonic relationships which can be discovered throughout the building's design. One example is the equidistant spacing of major foci through which a definite continuity of progression is established as one moves through the building. The entrance portal to the center of court A and on to the pool in court B presents one such progressive series; many more are reflected in the obvious symmetry of the plan. That the diagonal axis of court A itself equals one segment of this series demonstrates that the dimension of this central, organizing space derives directly from the geometry of the plan. Similar derivative and proportional relationships are present throughout the building's spatial and decorative formulations, at times quite rigorous in their application.

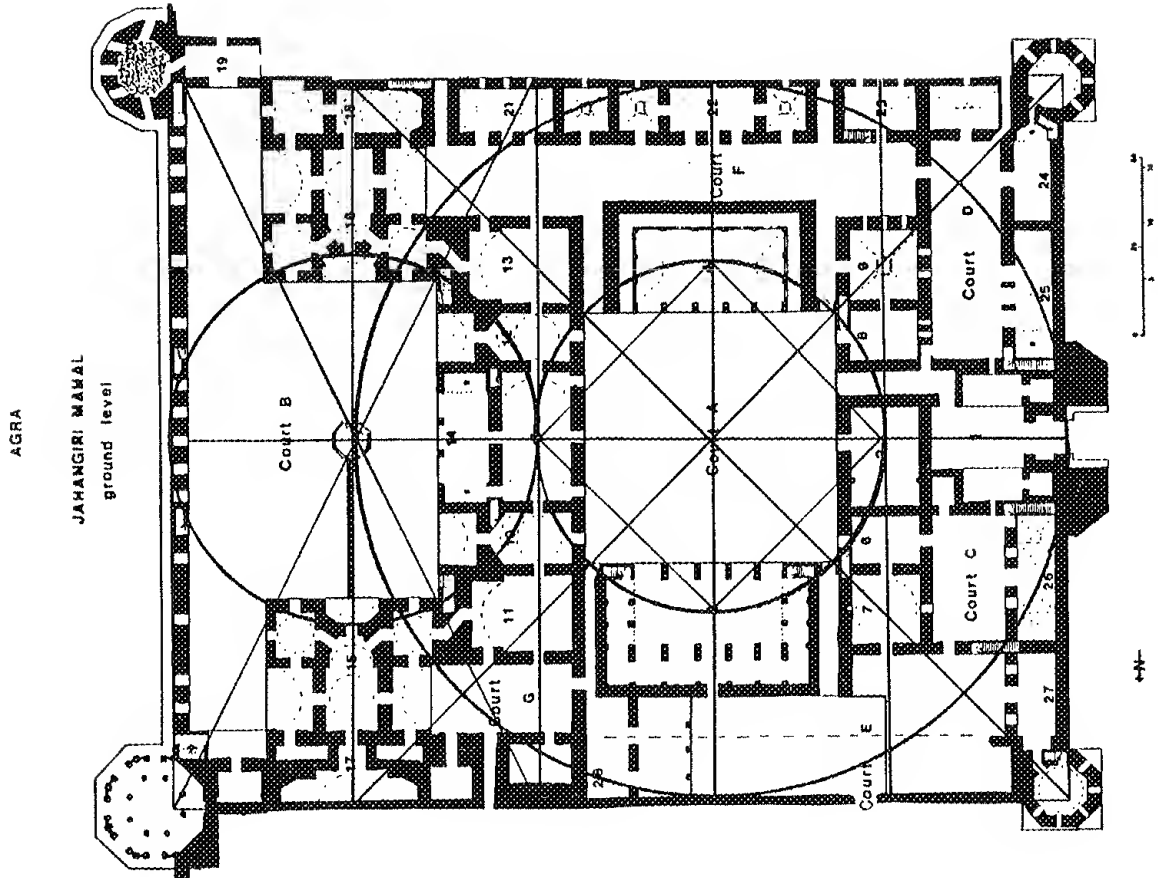
This proportionality relies to some extent on a modular system on which the plan of the Jahangiri Mahal is at least loosely based. This spatial module is defined by the central bay of the entrance hall (room 1) which measures approximately 5.6 meters square. This modular unit, or derivatives of it, occurs consistently throughout the plan. Court A, for example, has an area equal to sixteen of these units; court B increases this area by almost exactly half again. Some rooms, such as 7 and 9, merely repeat this modular dimension, but others increase it in one or more of their axes by ratios of 3:4, 3:2, or 2:1. The plan does not appear to be developed according to a rigid grid, however. Many discrepancies occur in actual measurements; some of them can be attributed, in part at least, to the varying thicknesses of the sandstone and stucco-faced brick walls, which range in width from 1 to 1.5 meters. This modularity establishes an essential proportional system for the building's basic design, while still allowing a certain practical freedom in its actual construction—it develops according to an ordered, but not minutely orchestrated, scheme.

The geometric and proportional correspondences discovered in the Jahangiri Mahal provide a generative approach to design that is almost musical in its resonances. The continuity which this provides to the otherwise seemingly staccato program of individual spaces in the design is crucial to experiencing the building. That experience is both mathematical and sequential in its progression.

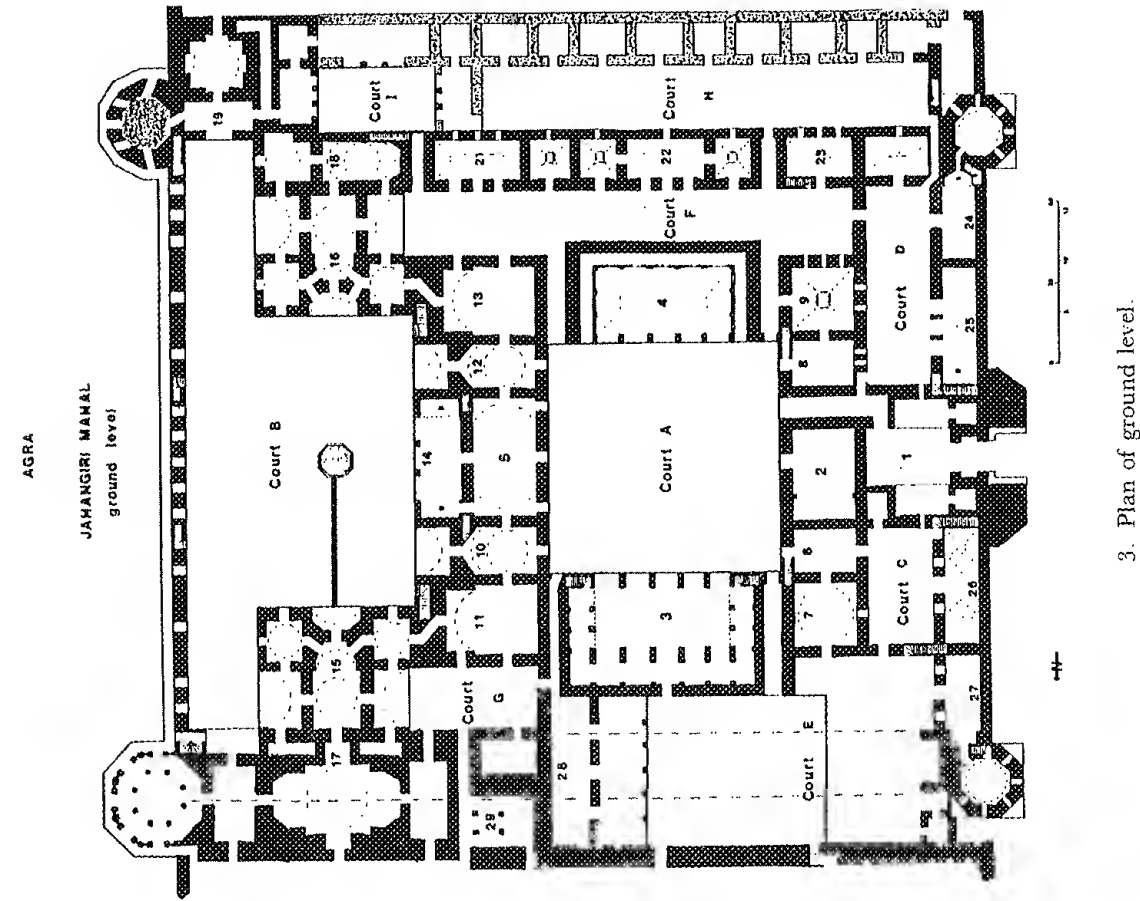
SPACE AND MOVEMENT

The sequential experience of space in the Jahangiri Mahal is established through symmetrical interdependence, the sympathetic rhythm of which, once apprehended, arranges itself into an easily followed pattern. In spite of their apparent independence, these spaces rely on one another for definition and are arranged according to an ordered and controlled reciprocity in the overall program. Space unfolds within the building as the experience of an ever accumulating series of relationships, deriving from and reflecting one another in their organization.

The western façade of the Jahangiri Mahal, however, forms an initial barrier to this spatial experience. An elaborately ornamented screen, it inhibits an understanding of the building's interior spaces, demanding an immediate visual attention but indicating little of the architectural setting behind it (fig. 5). Organized



4. Plan of ground level with geometric configuration.



3. Plan of ground level.



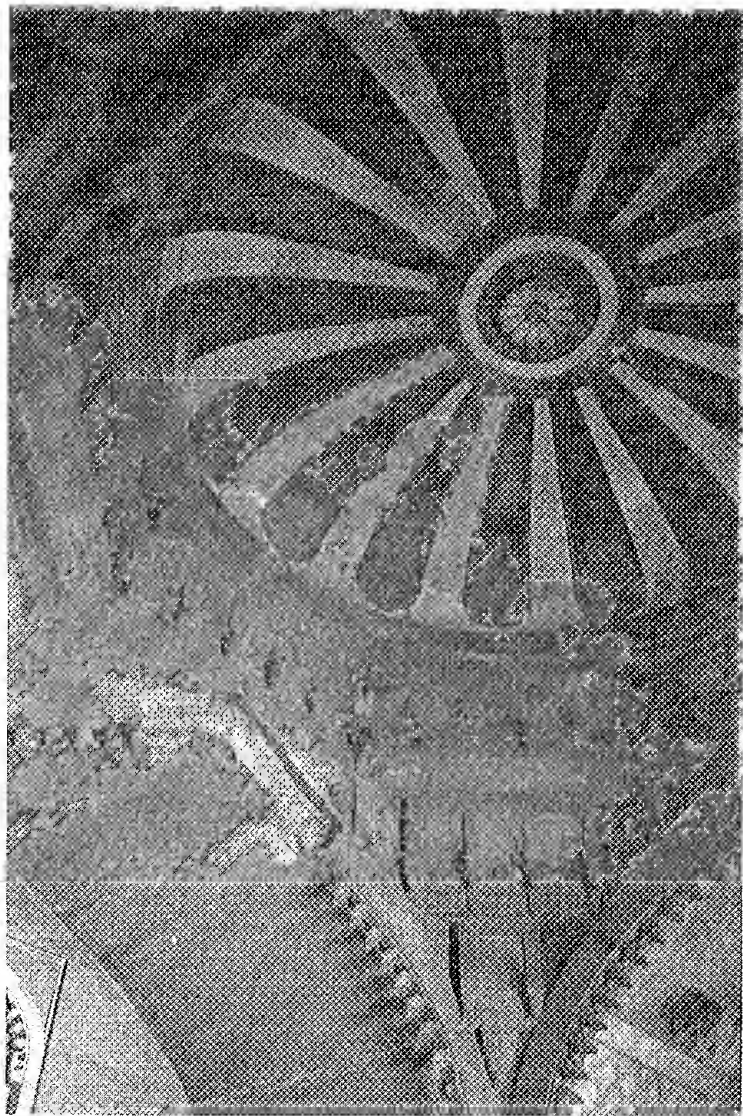
5. Western façade.

around the grand central porch, the ambitious and unusual decorative scheme of this entrance façade offers a complete and visually satisfying experience in itself. Passage beyond it requires a grant of admission on the part of the doorkeeper and an act of submission on the part of the visitor. This portal provides the only outside access to this palace building, past the dark, guarded entrance hall (fig. 6) surmounted by a hovering lotiform dome (fig. 7) and through a narrow, dark and angled corridor. The experience at the entrance, in other words, is one of a very protective restriction.

The passage from the entrance corridor to the building's interior is abrupt; the entrance door immediately loses its importance and becomes indistinguishable from the many others which open from it. Nor is a definite goal established for the visitor upon entering this open space. The relative importance of the large halls to the left and right (rooms 3 and 4)

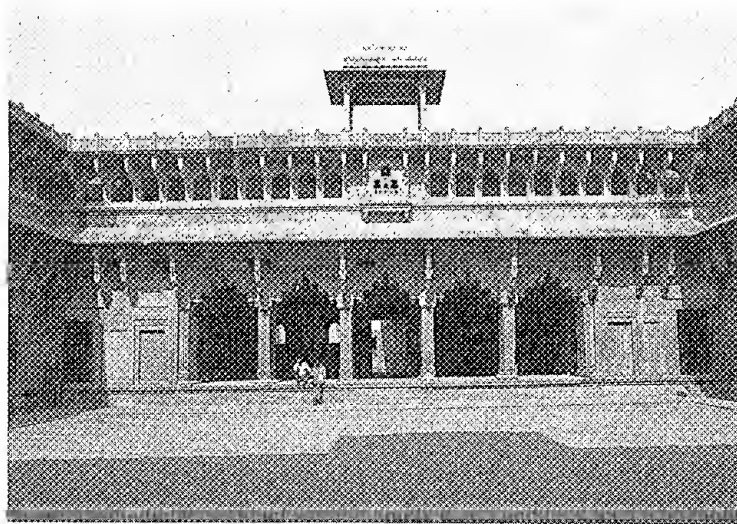


6. Entrance hall (room 1).



7. Entrance hall (room 1). Detail of squinch and dome.

One has a separate aisle and is adorned with massive *makara*-ornamented brackets (fig. 10); the other presents a unified space with a sweeping canopy vault (fig. 11). Rooms 2 and 5 also face the court with a similar perspective, but provide a sharp contrast in their interior expressions (figs. 12 and 13) and in their relation to surrounding areas. The rooms around court B, on the one hand, invite a feeling of movement; those attached to the subsidiary courts, on the other hand, are much more restricted. Through an alternating segregation and integration of spaces, the building establishes a sequence by which these spaces are encountered, experienced, and related to each other.

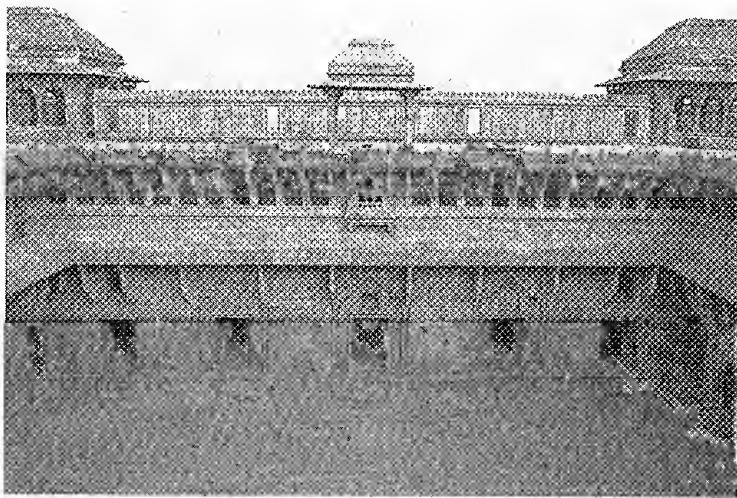


8. Court A with façade of room 3.

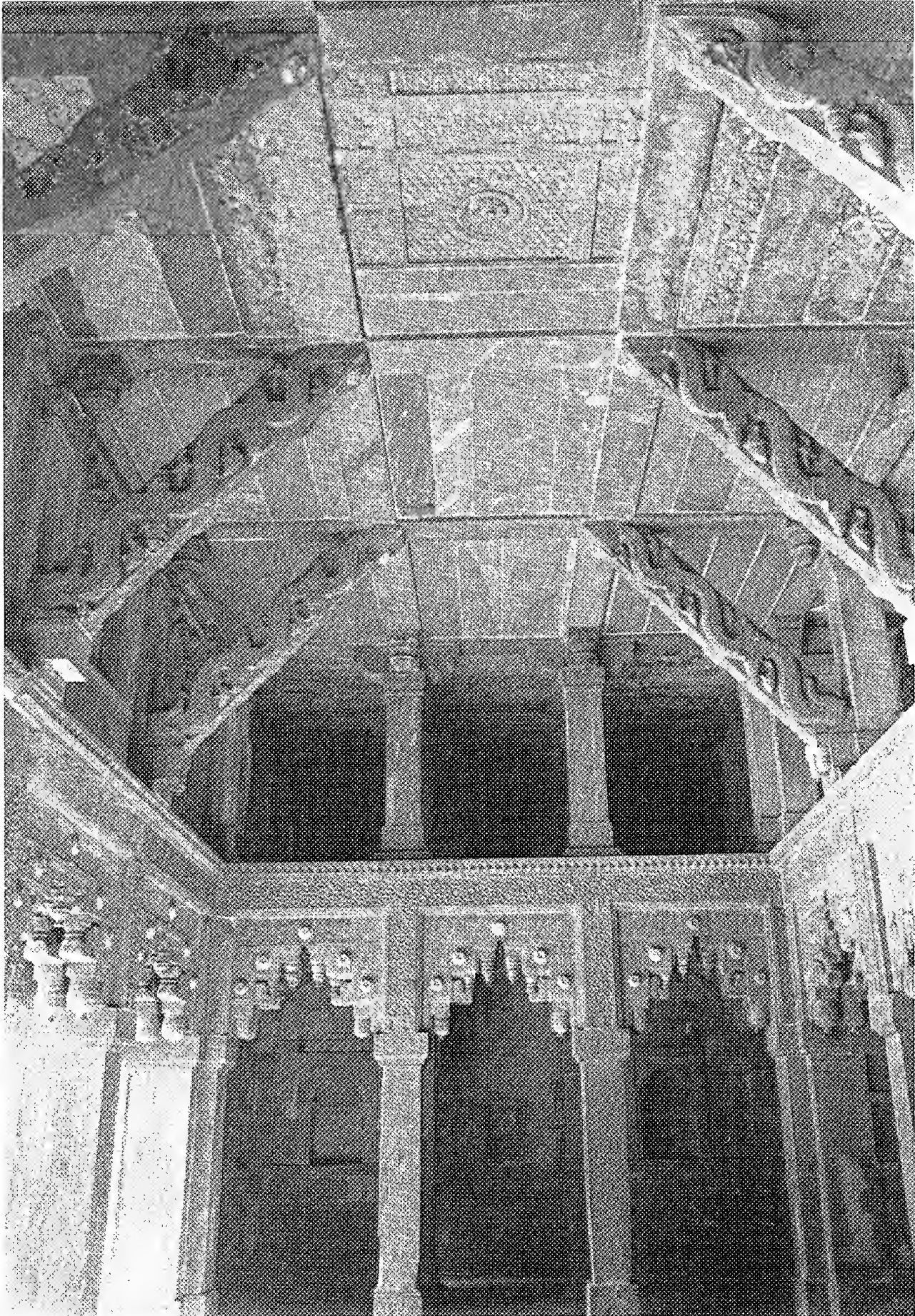
or of the several smaller ones around the court is defined less by a rigid spatial iconography than by the activity taking place in them. The building's spatial grammar becomes one not simply of geometry and proportion, but also of experience and function.

As one moves around this court (figs. 8 and 9) through the spaces attached to and defined by it, this experience quickly takes on a reflexive quality. Spaces are distributed according to a sequence of relations, both to each other and to the court, arranged by a definite hierarchical scale. In providing this sequence of spatial relationship, the various chambers in the building have been carefully differentiated through their articulation; sequences of space are balanced by sequences of formal expression.

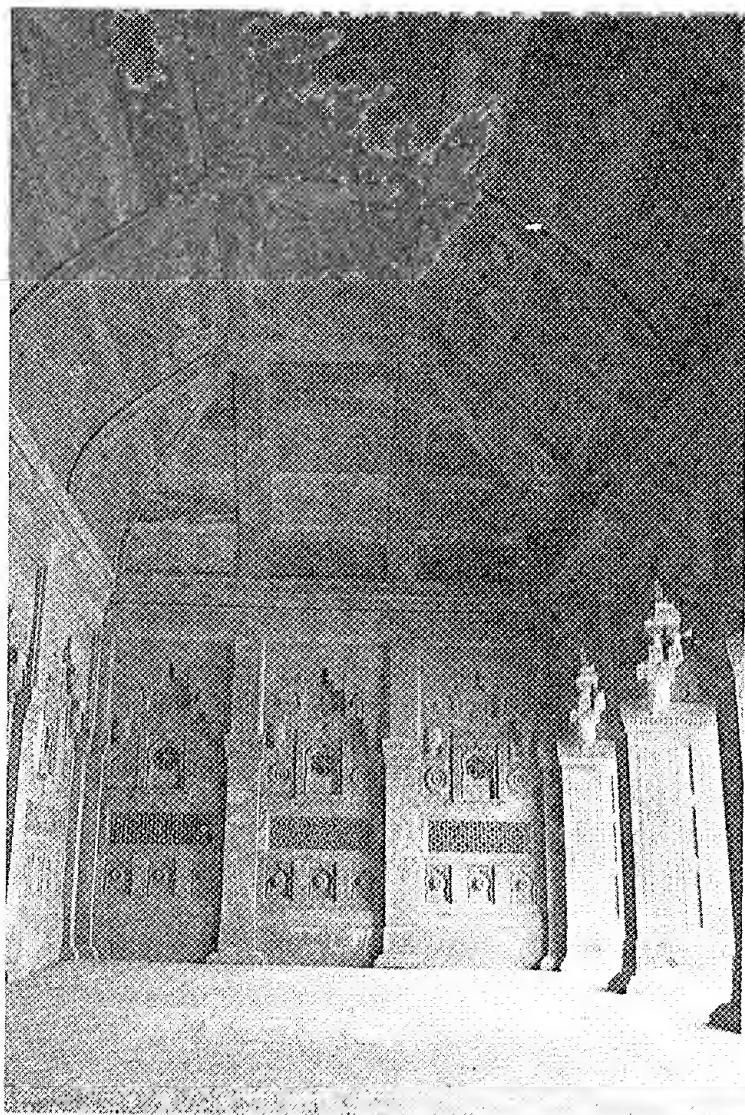
Rooms 3 and 4, for example, occupy a similar area in the plan, but are markedly different in character.



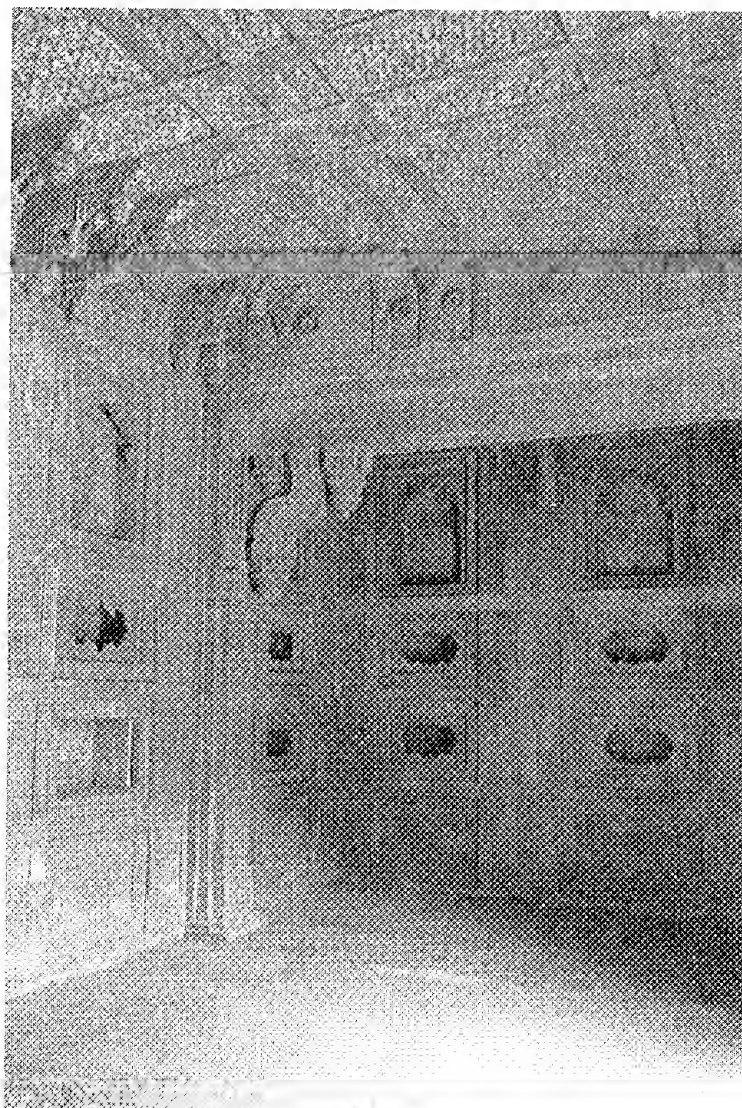
9. Court A with façade of room 5.



10. Interior of room 3.



11. Interior of room 4.

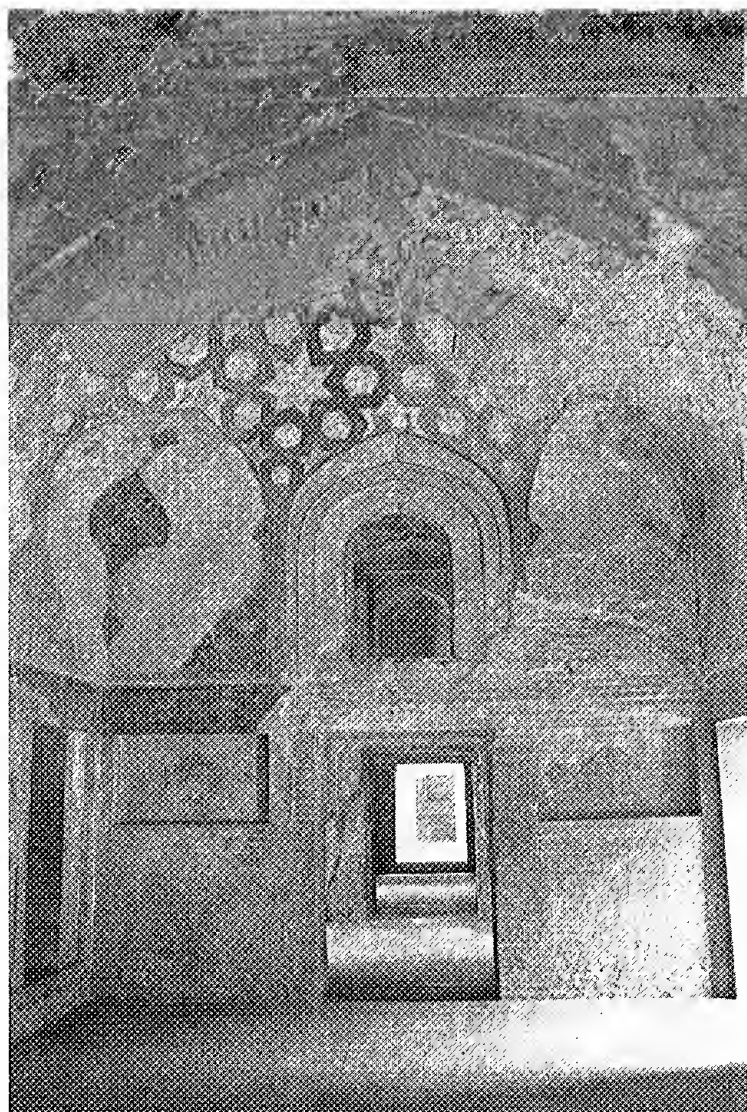


12. Interior of room 2.

The courtyards which form the framework of this sequential pattern are the most active elements in this spatial experience, disposed in a coherent and perfectly balanced formality which provides the building's essential organizational composition. Through their relationships, they establish not only the main perimeters and overall coordination of the spatial scheme—amplified upon but not changed by their attached chambers—but also the basic directional thrusts and mediations achieved in the design. The dominant axis which compels one through the building via courts A and B is countered by those of the other court (C, D, and F) which attempt to pull one around as much as through it. Court B (fig. 14) satisfies and resolves the tension between both in its grand culmination of this unfolding spatial sequence. Court B dissipates and redirects the forward thrust established by the entrance

and court A and initiates a new and further progression to either side, while at the same time completing the circuit initiated by the digression of the side courts.

At this point a further choice of movement becomes apparent: one can either go down to the elaborate basement "water room" (accessible only from court B and equipped with a large watersplash and pool) or up one of the several stairways to the upper levels. The latter include the hidden mezzanine level (fig. 15) comprising several small rooms and a beautifully composed arcade corridor with hanging balconies which wraps around court A as well as the large, open roof terrace (fig. 16) complete with pavilions, *chattris*, several private suites, and sweeping vistas over the riverscape below (fig. 17). The pace and the sequence by which one first discovers and then examines these various spaces and areas of the Jahangiri Mahal are in many ways the least



13. Interior of room 5.

manipulative aspect of the building. The basement chambers are accessible only from court B; the upper levels can be approached from numerous points around the building. But neither these lower or upper chambers are revealed or even significantly suggested by the experience of the main level; their stairways are small and hidden in the thick walls and, like the side courts, one must seek them out.

The movement between these intrinsically independent spaces and levels integrates them into the cohesive character that they express. It is a movement at times contested or at the least balanced by the stationary presence of the chambers and courtyards themselves. Each of these separate areas, serving as the discrete and self-contained center for their own architectural exposition, would seem at first to impose an inhibiting effect on the more encompassing unity of the design. Yet,

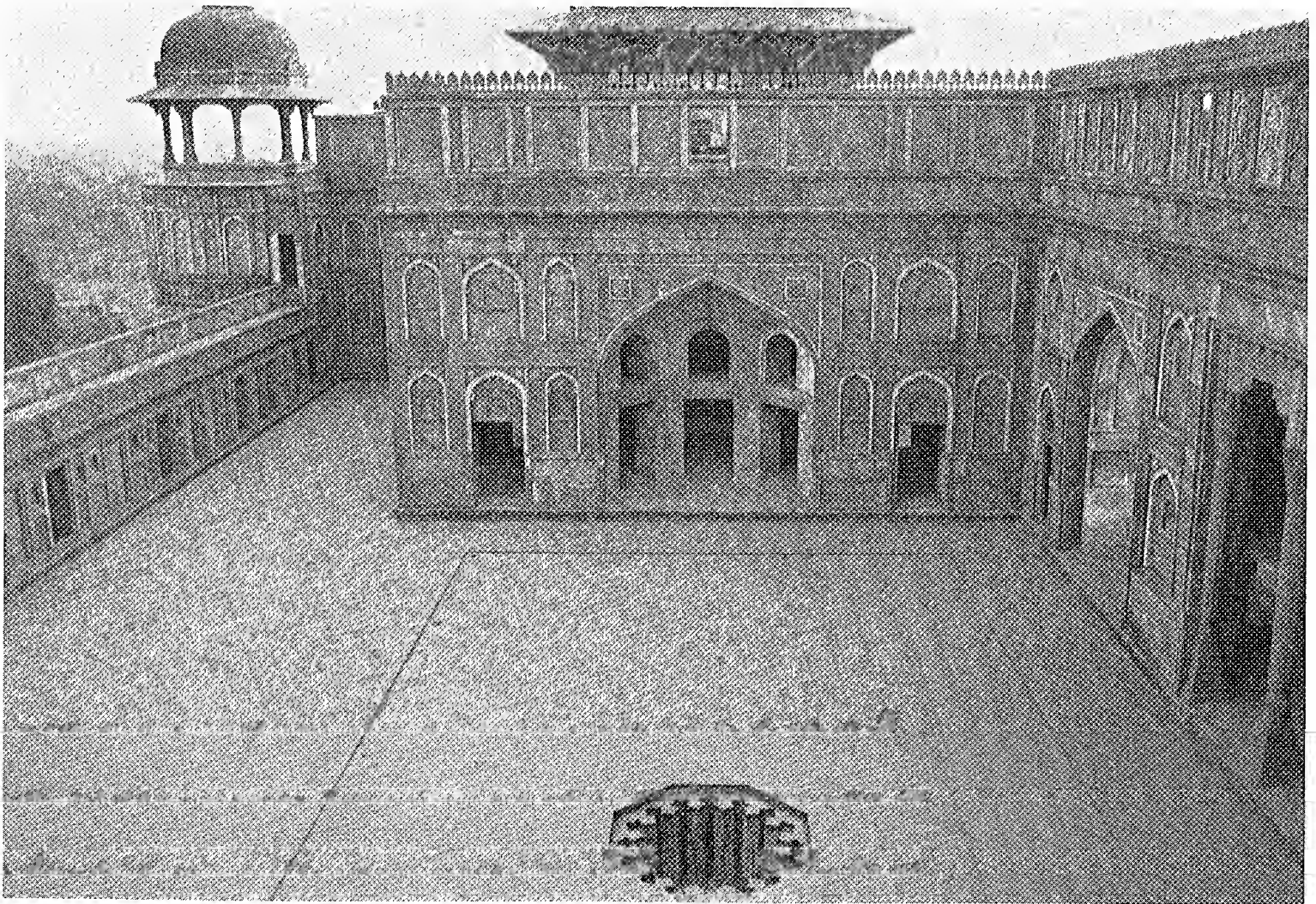
while providing numerous points of an apparently static repose, their arrangement in the overall composition necessarily creates a system of peripatetic movement between them. In this, the major spaces of the building assume a dual role as both centers and conveyors. Passing through the building, one is brought to any of its several related but consciously separated areas by an effort of choice and will rather than by a strictly defined inevitability. In assembling these spaces into a coherent experience of the whole, they reveal themselves as a logical series of events.

SURFACE AND ORNAMENT

Central to an unfolding perception of the Jahangiri Mahal's design are the material and decorative as well as the spatial relationships established between its various areas. The main façades of courts C and D (fig. 18), for instance, display a nearly synonymous formal treatment to those of court A. Moving through these various sandstone-faced courtyards one recognizes an immediate compatibility and familiarity of visual experience, a characteristic which also extends to the chambers which open from and join them. Court B, on the other hand, preserves a similar material identity in its program of richly carved sandstone but offers an inflection sufficiently different in its stage-like setting as to engender a distinctive experience (fig. 19). The chambers separating courts A and B inject a quite different tone into the building's ornamental language in their interior surfaces of ornately worked and painted stucco.

The decorative motifs comprising the ornamental program of the Jahangiri Mahal create a particular sense of surface, a luxurious and ubiquitous, varied yet consistent visual repertoire. This decorative character of the building is above all an incident of surface rather than of structure, enhancing and often signaling the structural phonetics, such as the preponderant brackets and massive stone pillars found throughout. The structural brick core of the building is completely masked by this superficial sheath of sandstone and stucco, crafted to create the ever changing surface rhythms and patterns which provoke such endless visual fascination.

The essential ornamental vocabulary to be used throughout the building is initiated on the two outer façades. Their paneled bay format and richly applied geometric and floral designs reiterate and refine traditional decorative formulas of the region presented here in a new creative mode. The entrance wall is



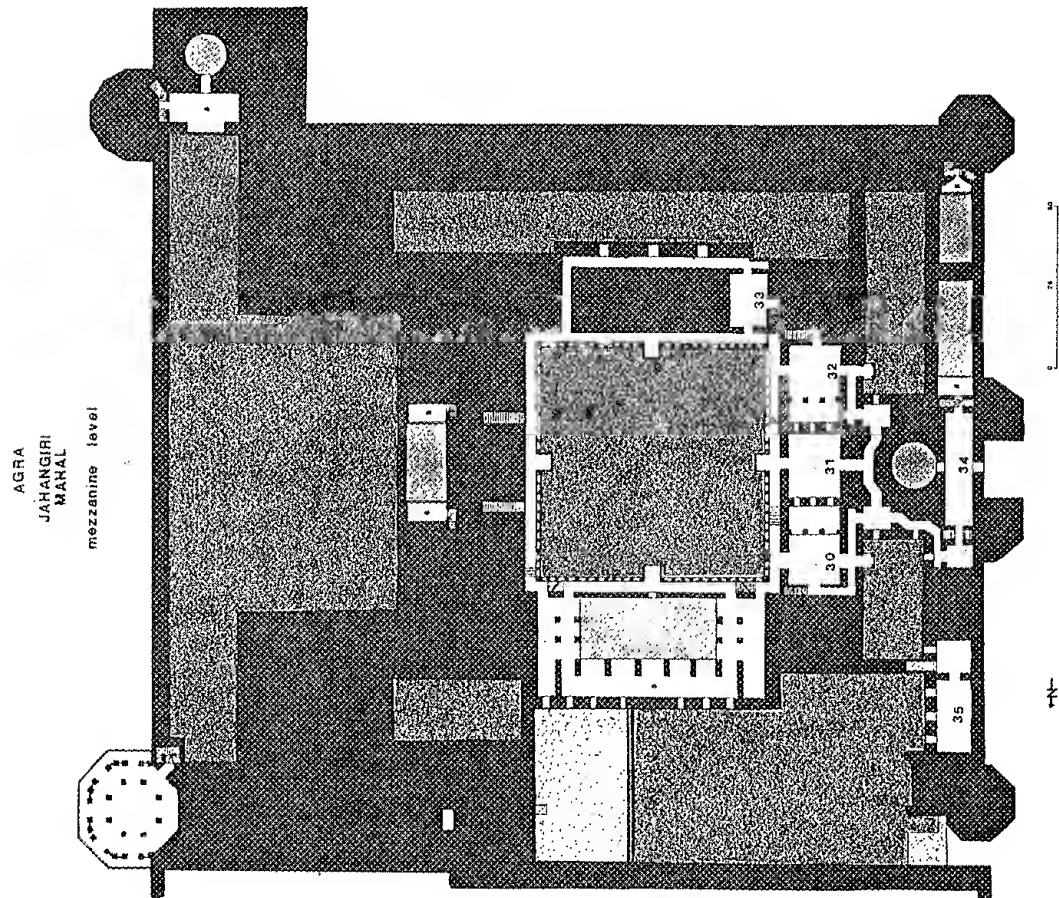
14. Court B.

dominated by its neatly framed geometric patterns (figs. 20 and 21), apparently model-book transpositions of Timurid designs and applied here in a manner new to Indian architecture. The river wall introduces another element in its elephant-and-pike panels (fig. 22), in this case probably borrowed from the nearby Hindu palaces of Gwalior. This river façade also provides a dominant focus in its small but prominent central *jharoka*, an effect achieved on the entrance wall by the projecting porch. In addition to the more prominent aspects of this decorative approach, an added surface texture is supplied by the low relief design applied uniformly across the background. The impact and energy of the program are thus diffused and distributed evenly and rhythmically over the entire surface of the wall, creating a quality of unity and cohesion which is carried on throughout the building's decoration.

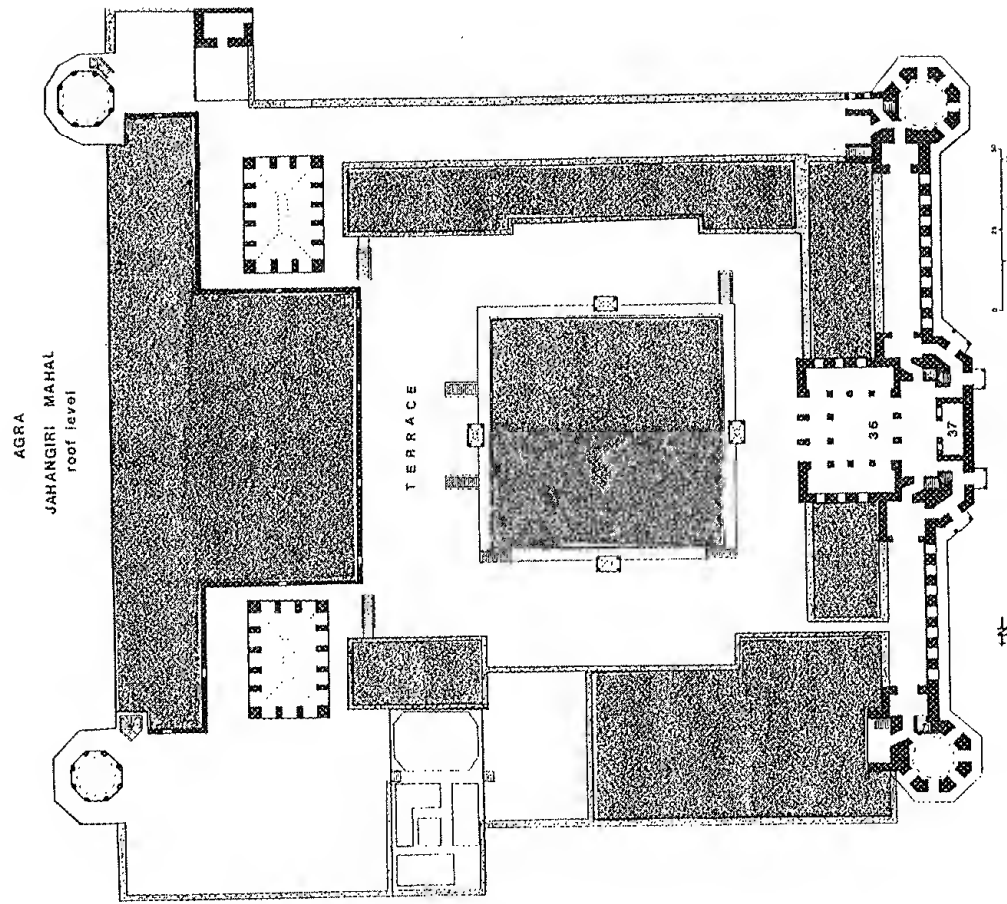
Passing into the entrance hall, the dynamic virtuosity

of carved sandstone introduced on the exterior walls follows one into the interior, dominated here by the impact of the central dome and ornate squinch-and-cornice ensemble. Emerging into the brilliant, sunlit space of court A, the sandstone surface springs even more vividly to life; a delicate, ornamental net of sculpted stone is cast over the entire area, spilling with an almost equal intensity onto pillars, brackets, cornices, and ceilings. The exuberance of this relief ornament is further accented by the delicate painted floral traceries which originally adorned portions of the interiors walls, unfortunately now all but destroyed. Additional intimations of color are found in the glazed tiles used sparingly around cornice moldings.

As in its spatial quality, the surface character of the building also espouses an ability to lead one through the building, providing ready and increasingly familiar points of visual reference, linking or differentiating



15. Plan of mezzanine level.



16. Plan of roof level.



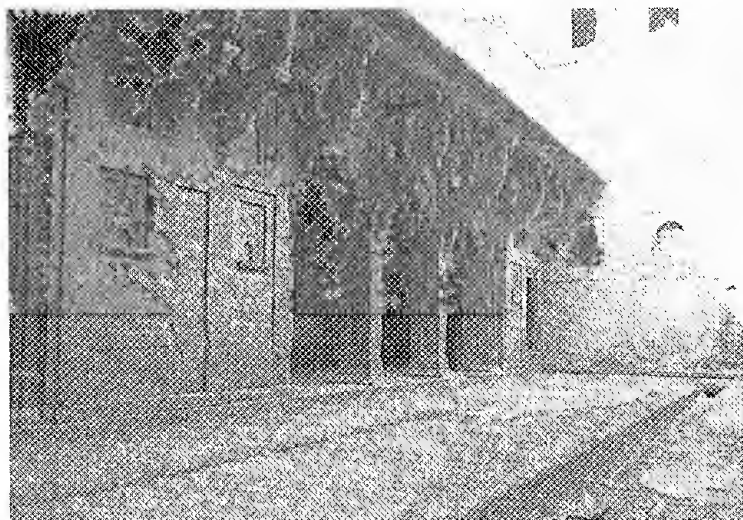
17. Exterior of room 36 on roof level.

between various areas of the design. The continuity of expression between courts A, C, and D and the formal transitions which take place in the vaulted rooms around court B have already been mentioned. The stucco surfaces of these latter (fig. 23), painted and modeled on patterns already introduced in stone, provide an almost antidotal counterpoint to the sandstone ornament which dominates while preserving a continuity of design. Punctuating notes, such as those found in the numerous sculpted aedicules of court B (fig. 24), combine with the delicate, unobtrusive surface patterns of the walls that hold them to create a finely textured tapestry, activated by the shifting light and shadows against them. The result is a vital and commanding visual appeal which follows one throughout the building.

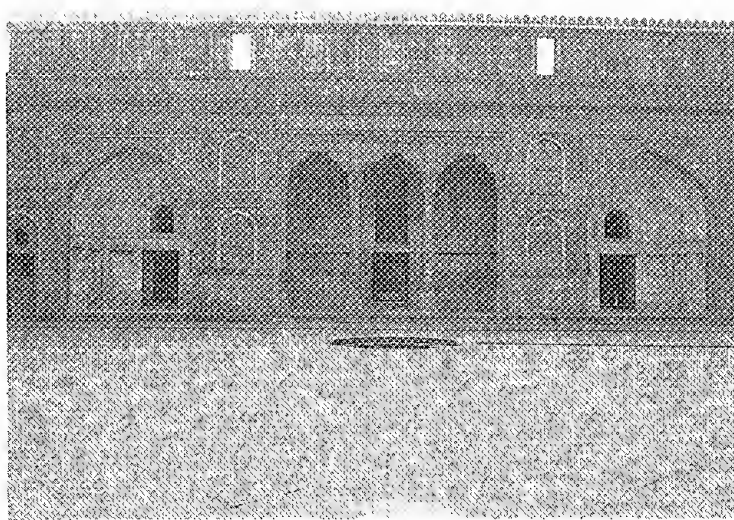
Equally important to the decorative expression of the Jahangiri Mahal are the numerous and varied cultural references employed. Elements of imperial Delhi, for

example, are predictably apparent in the stone, stucco, and tilework. The craftsmanship and rich repertoire of the Gwalior masons are abundant in their inspiration. Timurid geometric design, hitherto little used as a dominant ornamental program by buildings in the region, is a striking innovation employed by the builders here. Ingenious adaptations of traditional Indian forms—the *makara* brackets of room 3, the peacock brackets of room 36, the various vault designs—are equally striking in their synthesis of historical and original designs. The addition to its ornamental program of creatures from the indigenous tradition—the *hamsa*, parrot, elephant and *makara*—is another significant contribution of the Jahangiri Mahal to Islamic architecture in North India.

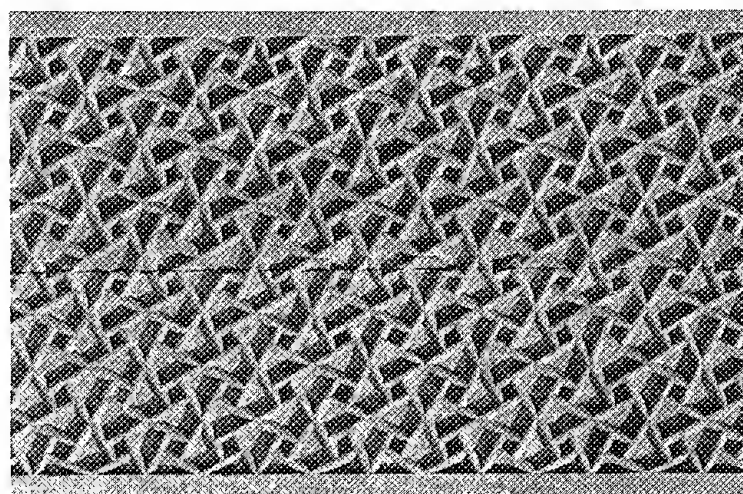
In reusing—in some cases, redefining—these elements of their Iranian and Indian inheritance, the crafters of the Jahangiri Mahal invent little, but show a remarkable facility in the skillful processing, adapta-



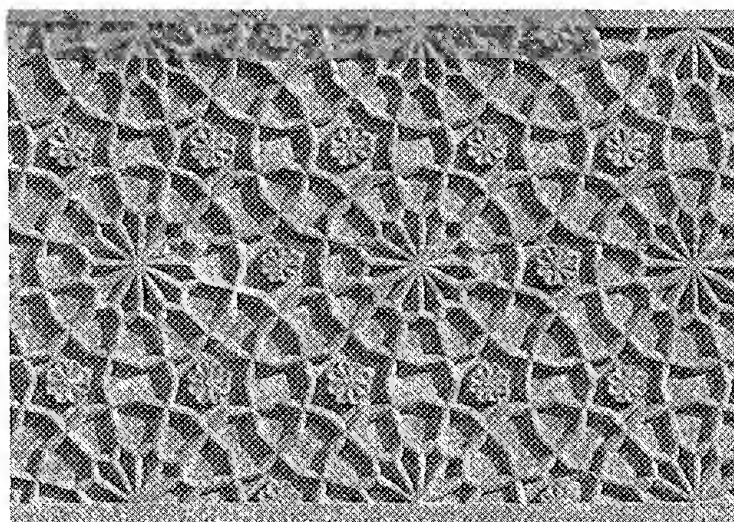
18. Exterior of room 25 in Court D.



19. Exterior of room 14 facing Court B.



20. Geometric panel from west façade.



21. Geometric panel from west façade.

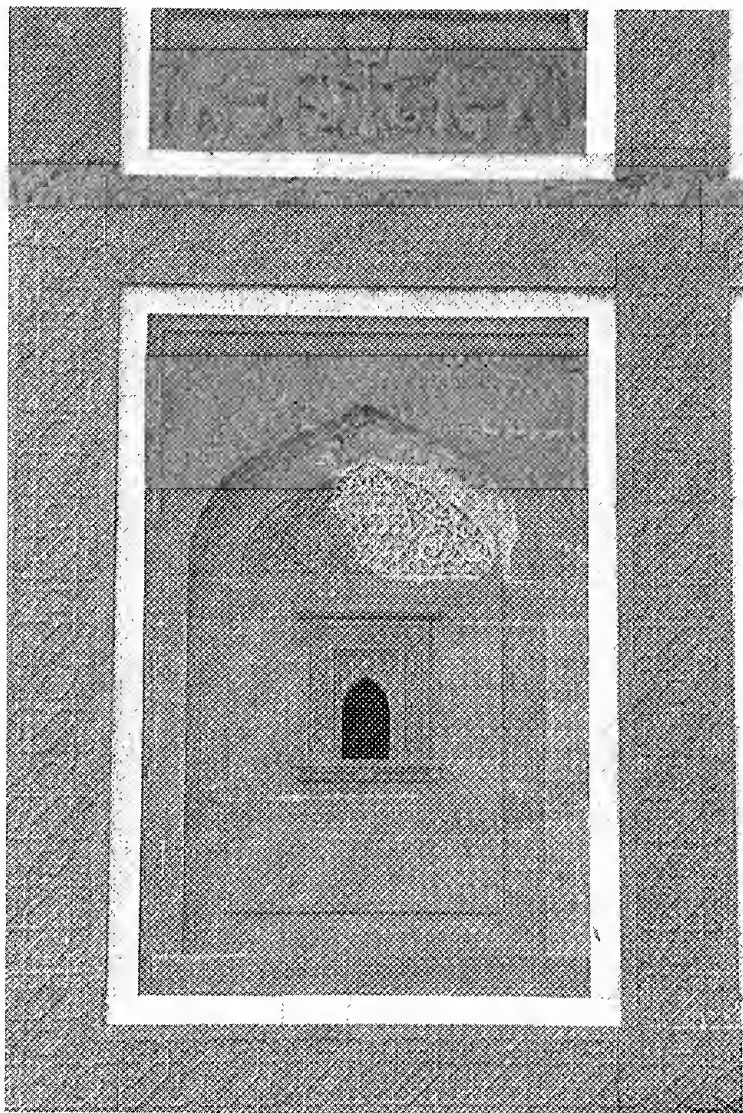
tion, and handling of these ornamental and architectural forms. Revising and creatively renewing these traditional motifs, they apply them in a consistent, coordinated program of surface ornament that dynamically defines the formal character of the building.

DESIGN AND FUNCTION

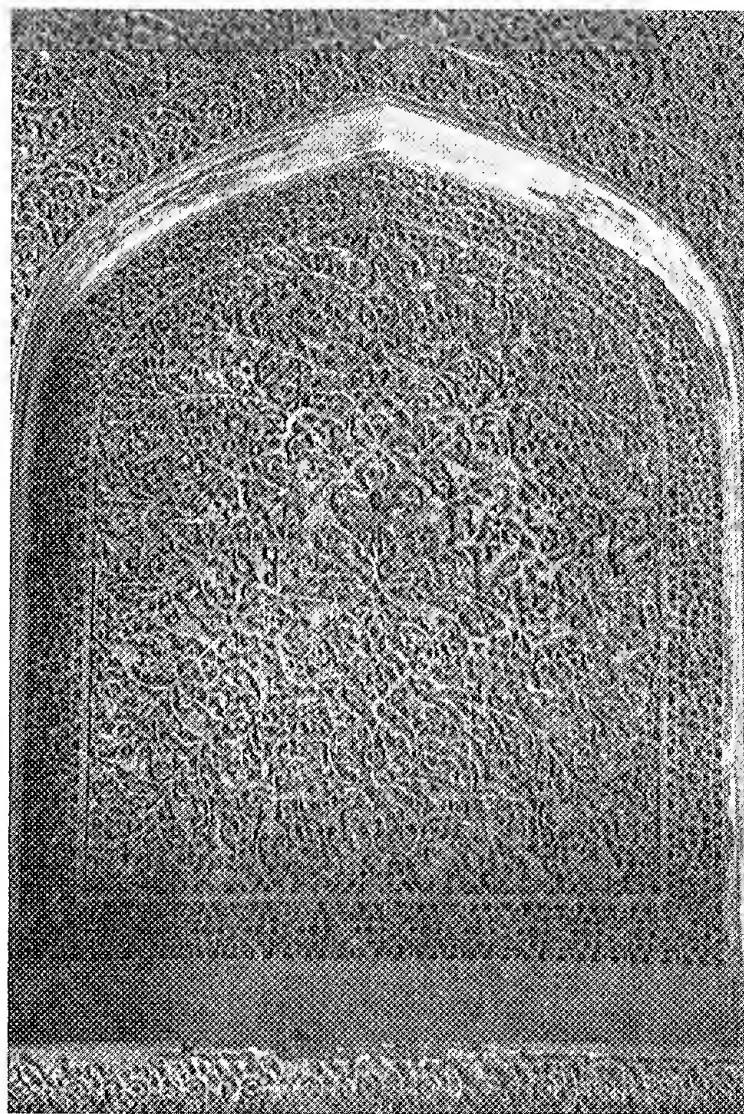
Architectural space and decoration seem to have been a flexible commodity in early Mughal building, adaptable to many and diverse purposes. This generic quality may itself reflect a significant aspect of the palace, suggesting it as a setting never intended to serve a strictly defined function. Neither the paintings nor

the literature of Akbar's court, both usually quite generic in their treatment of architecture, provide a true description of the buildings themselves. The iconography of the Mughal palace remains largely, perhaps intentionally, non-specific.⁵

Several aspects of the Jahangiri Mahal bespeak a particular aspiration, however; most important is what might be called its "intentional character of singularity." This has been pointed out, for instance, in its position and presentation within the larger palace complex of the fort. Occupying the place and the role of a prominent center in the original layout, its physical situation alone demands special consideration. Equally important are the exterior façades whose decorative message seems to declare the Jahangiri Mahal's distinc-



22. Detail of east façade.



23. Stuccoed niche in room 13.

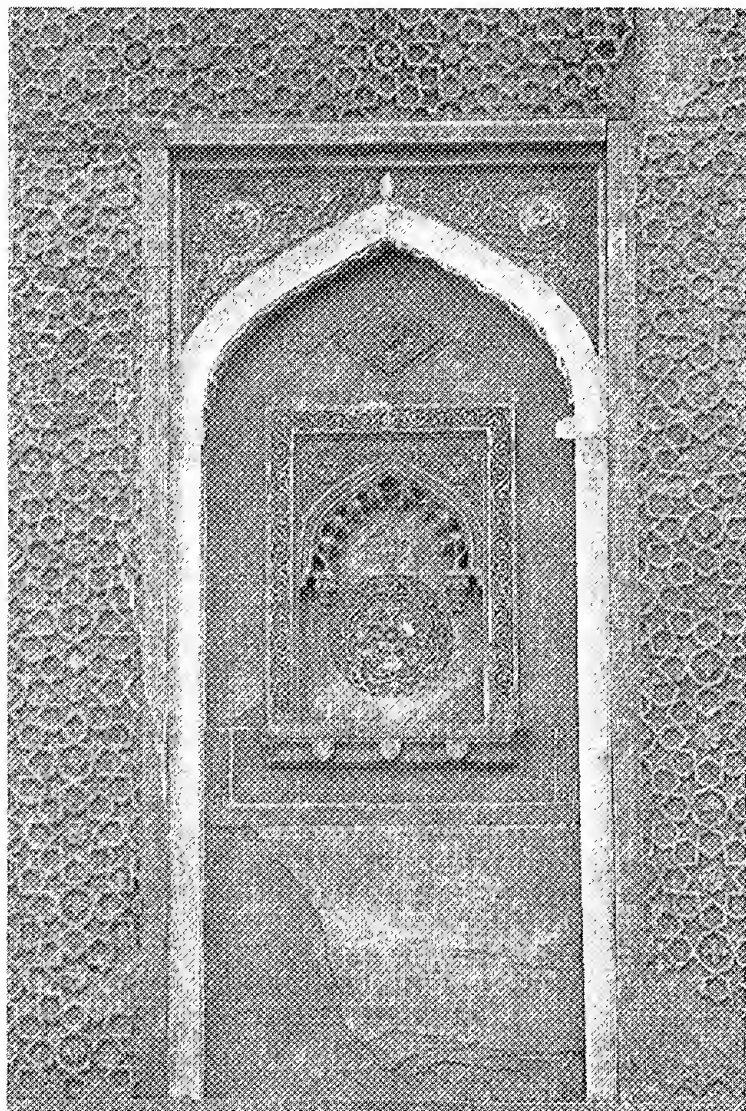
tive character in no uncertain terms. In its setting and its ornamental treatment, the building demands a particular recognition and creates in this way its own and unmistakable compositional iconography.

In addition to this public iconography as viewed from the outside, the building also creates a private iconography of design from within. By keynoting areas of major importance, the Jahangiri Mahal's plan concentrates perception on pivotal points around the building's interior—courts A and B, rooms 2, 3, 4, and 5—which become the major orienting forces. The particular functions of these areas, however, are not exactly described in the design; the design creates a unified setting which is then able to serve a variety of roles.

The several courts of the ground floor, for example, easily lend themselves to diversified purposes. The

magnificent display of court A is intentionally impressive, creating an imperial arena both intimate and grandiloquent in tone. Obviously not a public area (as witnessed by its restricted approach and relative scale), it probably provided a private ceremonial setting, a requirement for the palace. But the optimal flexibility of its design allows this court and its attendant halls to accommodate any number of events, from feasting to audiences, to policy-making conferences, shifting from room to room, from open to closed spaces, encompassing many levels of both circumstance and scale as occasion demanded.

Court B, on the other hand, though less majestic in its expression, inclines toward a more decidedly personal role. The small doorways that separate its attached rooms from the area of court A were equipped with swinging panels that would have allowed total



24. Detail of court B wall.

seclusion from the front and central regions of the building. As already mentioned, the delicately stuccoed, small, vaulted chambers around it also provide an ambience more removed and retiring in character than the front halls. Court B, with its immediate but private access to the adjoining buildings, its small watersplash and central pool, its open and expansive site against the river wall, offers a possibility of retreat and reflection—however magnificently attired—from the more pressing formality and openness of court A.

The front and side courts, private and seemingly remote from the centers of activity in the building, add even further to this potential layering of spatial meaning. The variety of material, decoration, and scale employed in their expression and in that of their adjoining chambers highlights the building's purposeful manipulation of a hierarchical function in its spaces.

Providing areas that range in treatment from the most courtly, as in the balconied hall (room 25) off court D, to more strictly utilitarian, as in the smaller rooms along court F, the design allows an array of possible activities which are at the same time only minimally restricted in their exact definition.

Specificity in function is relegated to such particular roles as the kitchen court (court H) just outside the perimeter of the Jahangiri Mahal proper. Here, the numerous small cooking chambers and beyond these the carefully isolated latrines provided for the immediate physical needs of the residents. On a very different level (figuratively as well as literally) is the small enclosed rooftop court (room 36). This area imposes an even more obvious hierarchy on the building. The emphatic position of this private ensemble at the top front center of the palace, a natural point of culmination in a building, makes it the crown of the design. It represents a miniature repetition not only of the building's formal expression, but also of its "intentional" expression, imposing centrality upon centrality, singularity upon singularity. Any spatial or functional egalitarianism suggested by the otherwise nearly perfect symmetry of the plan is here finally denied. Probably used as the private quarters of the emperor despite its inconvenience at the top of the building, this small suite presents an architectural expression summarizing the imperial role of the building as a whole.

Design serves function in the Jahangiri Mahal in its open provision for many and varied activities within the encompassing purpose of the building. To determine exactly the state and personal duties fulfilled in each space—which rooms provided for the harem, the library, and audiences—becomes less important than understanding the broader purpose the building was intended to serve. The Jahangiri Mahal could accommodate numerous activities and requirements of the court, but its real function supersedes them all.

HISTORY AND MEANING

The chroniclers of Akbar's reign not surprisingly treat the foundation of the new fort at Agra around 1564 as a major event in the young monarch's early rule. In establishing this citadel in the city endowed with imperial associations not only by his father and grandfather but also by their Lodi predecessors, the young Akbar was certainly seeking to impress his own personal authority and presence very legibly on the

physical and political landscape of his kingdom. His intent, quite naturally, was to create an architecture of conspicuous power. Establishing Agra as his center of operations only two years after his ascension to the Mughal throne, Akbar was to maintain its position as the first city of the realm more or less intact throughout his reign. Despite their own importance, neither Fatehpur-Sikri nor Lahore acquired the same significance. The building of the Agra Fort and the creation of its palace constituted an early avowal of this intended role for the city.⁶

The Jahangiri Mahal was constructed at the conceptual center of this larger Agra scheme and was intended to serve as the primary architectural embodiment of the imperial seat. The popular appeal of its decoration, the purposeful arrangement of its interior design, the insistent recollection of motifs associated with the kingly traditions of Iran and India all invoke an iconography of architectural power. Despite its lack of historical or inscriptional "explanation," the Jahangiri Mahal reveals its purpose and its meaning in direct and clearly recognizable visual terms. It displays an expression of imperial intention and ambition in its aesthetic and compositional character and through this engenders an experience simultaneously of delight and of authority. In the Jahangiri Mahal, Akbar has, in Abu'l Fazl's words, dressed "the work of his mind and heart in the garment of stone and clay."⁷

The position of the emperor depended on conspicuously maintaining the distinction between himself and ordinary men. The Jahangiri Mahal does this in architectural terms. In its particular quality of expression and execution, this building affirms the fundamental continuity of its own tradition—architectural and imperial, Indian and Islamic—yet distinguishes itself from it. At the same time, it is a work of crucial importance to the development of the Mughal style, coming as it does near the beginning of Akbar's reign and preceding the works at Fatehpur-Sikri by several years. Along with the contemporary tomb of Humayun in Delhi, the Jahangiri Mahal establishes a mode and a repertoire of architectural forms and motifs that were to become characteristic, indeed symptomatic, of its idiom, giving shape to an architectural tradition with the same vigor and intensity that its builder gave to the shaping of the Mughal state.

The essential expression and experience of the Jahangiri Mahal lie in its revelation of an architectural quality, captured and presented in each of its various aspects. It is a building that works. In many ways the

most effective and successful example of its oeuvre, it was also, in its builders' eyes at least, among the most most beautiful and perfected expositions of the palace form. The superlatives applied to Akbar and to his works by the court historians render such an interpretation not only plausible but predictable; everything this emperor did was seen not only as better than the work of his predecessors, but in some way a redefinition of how it was done. In Akbar's eyes and those of everyone in early Mughal India, the Jahangiri Mahal must indeed have been intended and appreciated as a building "the like of which heaven has not seen in the world in its time."⁸

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NOTES

1. Muhammad 'Arif Qandahari in his *Tārīkh-i Akbarī* dates the foundation of the Agra Fort to 1563-64 and notes that it took three years to complete; Nizam al-Din's *Tabaqāt-i Akbarī* dates the foundation to 1564-65 and states that the project took four years; Badauni in his *Muntakhab at-Tawārikh* and Abu'l Fazl in his *Akbarnāma* agree with Nizam al-Din on the date, but stretch the project to five and eight years respectively. These last two historians also speak of the new palace in Agra which had been completed by 1570. Both stylistic and archaeological evidence confirms the Jahangiri Mahal's contemporaneity with the fort's construction, and the building can be dated to this period (see my "Jahangiri Mahal of the Agra Fort," Ph.D. diss., Harvard University, 1985, pp. 165-75).
2. For a description of the buildings in the Agra Fort, see Nur Bakhsh, "The Agra Fort and Its Buildings," *Archaeological Survey of India Annual Report*, 1903-4, pp. 164-93; also T. Froude Tucker, "The Akbari Mahall in the Agra Fort," *ibid.*, 1907-8, pp. 8-22.
3. Irfan Habib, *An Atlas of the Mughal Empire* (1982), p. xiii, identifies the *gaz* in use at this time as 30.36 inches.
4. Attilio Petruccioli, "The Process Evolved by the Control Systems of Urban Design in the Moghul Epoch in India: The Case of Fatehpur Sikri," *Environmental Design* 1 (1984): 18-27.
5. Attributions of specific architectural functions to the Mughal palace have as often caused confusion as they have clarified the subject. Rooms in the Jahangiri Mahal, for example, have been identified as a Hindu temple or the library, and the whole building as the palace harem. A serious, if still misleading, attempt was made to apply specific functions to particular architectural forms at Fatehpur-Sikri by Sayyid A. A. Rizvi and Vincent J. A. Flynn in their *Fatehpur-Sikri* (1975). More recently an excellent addition to this literature has been provided by Glenn D. Lowry and Michael Brand in the glossary accompanying *Fatehpur-Sikri: A Sourcebook* (Cambridge, Mass., 1985).
6. The relationship between the various capitals of Akbar's reign is still an unresolved problem. Although a large proportion of

- the court's personnel necessarily followed the emperor on his numerous moves, not all administrative functions were mobile. Numerous references attest that Agra remained an administrative center even when Fatehpur-Sikri or Lahore were serving as Akbar's primary, if temporary, residence (see Klingelhofer, "The Jahangiri Mahal," pp. 19-27).
7. Abu'l Fazl, *Ā'in-i Akbarī*, trans. H. Blochmann (1873), vol. 1, pp. 222.
 8. Muliammad 'Arif Qandahari, *Tārīkh-i Akbarī*, as quoted in Lowry and Brand, *Fatehpur-Sikri: A Sourcebook*, p. 293. The beauty and quality the Jahangiri Mahal displays today are the result of the remarkable conservation efforts undertaken by the Public Works Department at the turn of the century. For a description of their activities, see John H. Marshall, "Conservation of the Monuments of Agra," *Archaeological Survey of India Annual Report*, 1902-3, pp. 60-67.